

State of California  
AIR RESOURCES BOARD

**Notice of Decision and  
Response to Significant Environmental Issues**

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE  
CALIFORNIA ZERO-EMISSION REGULATIONS

Approved by: Resolution 01-1

Adopted by: Executive Order G-01-058  
Executed: December 7, 2001

Agenda Item No.: 01-01-1

Public Hearing Date: January 25, 2001

Issuing Authority: Air Resources Board (ARB or Board)

Staff Report: The Staff Report: Initial Statement of Reasons contained a chapter analyzing the environmental impacts of the proposed amendments pursuant to section 60005, title 13, California Code of Regulations (CCR). The originally proposed amendments made substantial changes to the Board's zero-emission vehicle (ZEV) regulation (section 1962, title 13, CCR) as last amended in the 1998-99 "LEV II" rulemaking. The ZEV regulation's percentage ZEV requirements now apply starting in the 2003 model year, but manufacturers have been taking various steps to comply – including generating early introduction credits – for some time.

Consistent with past ARB practices, the Staff Report compared the anticipated environmental impacts of the proposed amendments to the environmental conditions if no amendments were adopted and manufacturers were accordingly required to comply with the outstanding ZEV regulation. The ZEV requirements were originally adopted in a 1990-1991 rulemaking, and then were amended in rulemakings conducted in 1992-1993, 1996, and 1998-1999. In each rulemaking the Board had conducted environmental reviews of the amendments. If a project such as a rulemaking is amending previously adopted regulations that were subject to environmental reviews, an agency may appropriately conduct its new environmental review solely on

the impact of the amendments on the preexisting regulation. See *Black Property Owners Association v. City of Berkeley*, 22 Cal.App. 974, 985-986 (1994), *Benton v. Board of Supervisors*, 226 Cal.App. 3d 1467, 1475-1482 (1991) and *Temecula Band of Luisino Mission Indians v. Rancho California Water Dist.*, 43 Cal.App. 4th 425, 437-438 (1996).

The originally proposed amendments had the overall effect of significantly reducing the number of ZEVs that needed to be marketed, particularly in the nearer term. The proposed amendments phased in the production of vehicles generating partial ZEV allowances (PZEVs). The Staff Report estimated that the proposed amendments would increase direct emissions of reactive organic gases plus oxides of nitrogen (ROG + NOx) by 0.14 tons per day in the South Coast Air Basin in 2010. In 2020, the comparable figure was a net decrease of 0.08 tons per day of ROG + NOx.

Comments and Responses:

In written comments submitted two days before the January 25 hearing, General Motors (GM) argued that the ARB should consider the environmental impacts of the proposed amendments compared to not having any ZEV requirements. It further asserted that the amended ZEV requirements would actually increase emissions of ROG + NOx in the state. This was because GM claimed the ZEV requirements would result in price increases for new California vehicles that would cause the public to keep older, higher emitting vehicles on the road longer, and the increased emissions from the reduction in "fleet-turnover" would more than offset the emission benefits from the new vehicle fleet resulting from the ZEV program. GM's claims of increased emissions were largely based on a January 2001 report by National Economic Research Associates, Inc. and Sierra Research, Inc. entitled "Impacts of Alternative ZEV Sales Mandates on California Motor Vehicle Emissions: A Comprehensive Study" (the NERA/Sierra Report). It presented a number of emission scenarios, with the "base case" showing an increase in emissions of 2.72 tpd ROG + NOx in the South Coast Air Basin in 2010, with a 1.63 tpd increase in 2020.

On October 31, 2001, the ARB announced it was adding to the rulemaking record a comprehensive ARB staff review of the NERA/Sierra Report. This Staff Review is attached to

the Final Statement of Reasons for this rulemaking, which is incorporated herein. The Staff Review identified a number of respects in which NERA/Sierra's incremental cost assumptions were too high based on current information. Using more reasonable staff assumptions rather than the assumptions used in the NERA/Sierra analysis, the NERA/Sierra model projected an average per vehicle increased cost of roughly \$25 to \$40 per vehicle for the fleet of new vehicles whose prices would be affected by the ZEV requirements – compared to the \$250 to \$400 estimated in the NERA/Sierra Report. The staff concluded that at these modest levels, such increases would have an insignificant effect on vehicle sales. Even if one accepts the NERA/Sierra premise that any price increase, no matter how small, will reduce vehicle sales in accordance with the NERA/Sierra model, staff's emissions analysis using the EMFAC 2001 ver. 2.07 draft emissions model indicated that the ZEV program as amended in this rulemaking – when compared to having no ZEV requirements – will result in an emission decrease rather than the emission increase alleged in the NERA/Sierra Report.

On November 15, 2001, GM submitted comments prepared by NERA/Sierra on the cost estimates in the Staff Review, and on November 30 GM and the Alliance of Automobile Manufacturers submitted comments on the staff's emissions analyses. These comments updated the modeling work presented in the January NERA/Sierra report to reflect the most recent regulatory modifications, discussed various points made by ARB staff in its Staff Review, and again asserted the ZEV program as amended would lead to an emission increase rather than decrease. But the most recent NERA/Sierra analysis shows an emissions increase from the ZEV program as amended herein only for scenarios that reject or nullify two major cost reductions identified by ARB staff, which together accounted for nearly 40 percent of the purported price increase. NERA/Sierra has not presented results for a scenario that incorporates all ARB cost assumptions and therefore has not demonstrated that the modified program results in an emission increase when using those assumptions. The incorporated Final Statement of Reasons contains the staff's response to these additional comments.

A few additional comments identifying significant environmental issues were received. These comments are

summarized and responded to in the Final Statement of Reasons.

Resolution 01-1 and Executive Order G-01-058 are incorporated herein and attached hereto. In those documents the ARB made various findings pertaining to potential environmental impacts of the amendments. The ARB found that the proposed regulations would not have any significant adverse environmental impacts.

Certified:

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W. Thomas Jennings  
Senior Staff Counsel

Date:

December 7, 2001